

Amendments to the claims:

1. (Currently amended) A method for the manufacture of a nucleic acid molecule comprising the following steps:

(a) providing a first at least partially double-stranded oligonucleotide, whereby the oligonucleotide comprises a first single-stranded overhang, and a first modification allowing the oligonucleotide to be immobilised to a surface, wherein the first modification comprises a second single-stranded nucleotide overhang, wherein the first oligonucleotide is a first part of a nucleic acid to be manufactured.

(b) providing a second at least partially double-stranded oligonucleotide, which whereby the oligonucleotide comprises a recognition site for a first type IIS restriction enzyme which cuts outside its recognition site, a second modification allowing the oligonucleotide to be coupled to a surface and a single-stranded overhang, wherein the second oligonucleotide is a second part of a nucleic acid to be manufactured.

(c) ligating the first oligonucleotide and the second oligonucleotide via the first single-stranded overhang of the first oligonucleotide and the single-stranded overhang of the second oligonucleotide, generating a first ligation product, whereby the first ligation product comprises the first [[a]] modification allowing the first ligation product to be immobilised to a surface, wherein the first modification of the first ligation product ~~essentially corresponds to~~ is the second single-stranded nucleotide overhang of the first oligonucleotide,

(d) cutting the first ligation product with the first type IIS restriction enzyme thus releasing

-an elongated first at least partially double-stranded oligonucleotide having a first and a second single-stranded overhang, whereby the first single-stranded overhang is generated through the cutting of the restriction enzyme and whereby the second single-stranded overhang ~~corresponds essentially to~~ is the second single-stranded nucleotide overhang of the first at least partially double-stranded oligonucleotide, ~~preferably the at least partially double-stranded oligonucleotide~~ of step (a), and

- a truncated second at least partially double-stranded oligonucleotide;

(e) immobilising the truncated second at least partially double stranded oligonucleotide of step d), the unreacted second at least partially double-stranded oligonucleotide and/or the uncut first ligation product via the second modification to a surface;

(f) optionally repeating steps (a) to (e) at least once, whereby the elongated first at least partially double-stranded oligonucleotide of step (d) serves as the first at least partially double-stranded oligonucleotide in step (a), and is further elongated.

2. (Currently amended) The method of claim 1, comprising the following step ca) immobilising the first ligation product to a surface via the first modification comprising the single-stranded overhang.

3. (Currently amended) The method of claim 2, wherein the surface comprises a nucleic acid having a single-stranded stretch which is at least partially complementary to the first modification of the first ligation product comprising the single-stranded overhang.

4. (Previously presented) The method of claims 1, 2 or 3, comprising the following step cb) washing the immobilised first elongation product; and cc) releasing the immobilised first elongation product from the surface.

5. (Previously Presented) The method of claim 4, wherein the length of the first single-stranded overhang of the first at least partially complementary oligonucleotide has a length of 1, 2, 3, 4 or 5 nucleotides.

6. (Currently amended) The method of claim 5, wherein the first modification comprising the second single-stranded overhang of the first oligonucleotide allows for a stable hybridisation to the single-stranded stretch of the nucleic acid comprised on the surface.

7. (Previously Presented) The method of claim 6, wherein the hybridisation is stable under the reaction conditions of step cb).

8. (Previously presented) The method of claim 7, wherein the modification comprising the second single-stranded overhang of the first oligonucleotide has a length from about 5 to 20 nucleotides, from about 10 to 20 nucleotides, from about 15 to 18 nucleotides, from about 5 to 10 nucleotides and from about 6 to 8 nucleotides, depending on the nature of the nucleotides.

9. (Currently amended) The method of claim 1 [[8]], wherein the second modification of the second at least partially double-stranded oligonucleotide is a biotin modification.

10. (Previously Presented) The method of claim 9, wherein the immobilisation of step e) occurs via interaction of the biotin and the surface, whereby the surface preferably comprises a biotin interaction group.

11. (Previously Presented) The method of claim 10, wherein the biotin interaction group is selected from the group comprising avidin, streptavidin, extravidin, mutants of each thereof and synthetic biotin binding sites.

12. (Previously Presented) The method of claim 11, wherein a part of the nucleic acid to be manufactured is part of the elongated first at least partially double-stranded oligonucleotide.

13. (Previously Presented) The method of claim 12, wherein steps a) to e) are repeated at least once, whereby the nucleotides transferred from the second and any further at least partially double-stranded oligonucleotides provided in step b) to the first at least partially double-stranded oligonucleotides are the nucleic acid to be manufactured or a part thereof.

14. - 67. (Canceled)